

Application No. 09/555,140  
Reply dated December 22, 2003  
Response to Office Action dated October 23, 2003

## **REMARKS/ARGUMENTS**

### **Description of amendments**

Claims 13, 15-22, 35 and 36 are now pending and under examination. Applicant has amended claim 19. No new matter has been added.

### **Rejection under 35 U.S.C. §112, second paragraph**

Claims 13, 15-22, 35 and 36 were rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention.

Regarding the term “approximately,” it appears to Applicant that the Examiner interpreted the third full paragraph on page 3 of the specification to mean that the cellulose-containing filter paper can have a cellulose content of up to 50%. Applicant has a different reading of the paragraph and respectfully requests that the Examiner reexamine this paragraph.

The third full paragraph on page 3 of the specification as originally filed reads

The cellulose-containing filter papers can also have a foreign substance content of up to 50%, with the foreign substances possibly being glass fibers or polyester fibers.

This paragraph states that the foreign substance content is up to 50%. In other words, the cellulose content is 50% or more. This is just the opposite of the Examiner’s reading of the paragraph. In the Appeal Brief filed November 18, 2002 and in the Reply filed on July 29, 2003, Applicant argued that because the cellulose content of the filter paper is 50% or more, the claim language “predominantly cellulose containing filter paper” is not unclear, considering that the dictionary definition of the word “predominantly” is “most common.” Accordingly, Applicant respectfully requests reconsideration and withdrawal of this ground of rejection.

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Regarding the Examiner's objection to the phrase "during a folding process" in claim 19, Applicant has amended claim 19 to recite that the filter medium of claim 19 is pleated, thereby overcoming this ground of rejection.

Regarding the Examiner's contention that it is unclear as to what type of filter paper the term "compressed filter paper" implies, Applicant respectfully points out that "compressed filter paper" is structurally different from filter papers that are not compressed. For example, in the paragraph bridging pages 4 and 5, the specification states that "compressed cellulose layers, even with very limited thickness, possess sufficient mechanical stability and hence a sufficient supporting function of the synthetic filter layer as well as sufficient mechanical strength of the entire filter system." Therefore, Applicant respectfully submits that compressed cellulose layers have increased strength when compared with a filter paper that is not compressed.

Regarding the language "at least about 50 g/m<sup>2</sup>," Applicant respectfully submits that the language is used to indicate that the presently claimed invention does not require the use of exactly 50 g/m<sup>2</sup> density or more. Applicant respectfully submits that a person with ordinary skill in the art can determine what "at least about" means in accordance with established practice in the art for a given application. Under certain circumstances, the determination is similar to determining the proper manufacturing tolerances and is done routinely by a person with ordinary skill in the art. If the Examiner considers it necessary, Applicant is prepared to provide a §131 affidavit to that effect.

**Rejections under 35 U.S.C. §103(a)**

Claims 13, 15-19, 21, 35, and 36 were rejected under 35 U.S.C. §103(a) as being unpatentable over Kadoya in view of Sabee or Togashi. Claim 18-20 were rejected under 35 U.S.C. §103(a) as being unpatentable over Kadoya in view of in view of Sabee or Togashi, and further in view of alleged Applicant's admission in the Appeal Brief filed on November 18, 2002. Claim 22 was rejected under 35 U.S.C. §103(a) as being unpatentable over Kadoya in view of in view of Sabee or Togashi, and further in view of Klimmek. For at least the following three reasons, Applicant respectfully requests reconsideration and withdrawal of the rejection.

Applicant respectfully submits that each of the independent claims recites limitations that are not taught or suggested by the cited references. First, each independent claim recites a discharge layer having a storage capacity for particles to be filtered out of the fluid. The discharge layer (2 or 3) of Kadoya is not described as having a capacity for storing particles filtered out of the fluid. Instead, the discharge layer (2 or 3) is configured as a sieve (see the drawings of Kadoya).

Second, Kadoya does not disclose an inflow layer that has a weight per unit area of 15 to 150 g/m<sup>2</sup>. The nonwoven fabric layer (5) shown in Figures 1 and 2 of Kadoya has a thickness of 1.2 mm and a density of 0.15 to 0.25 g/cm<sup>3</sup>, which is 180 to 300 g/m<sup>2</sup>. Regarding the nonwoven fabric layers (5a and 5b) shown in Figures 3 and 4 of Kadoya, only the total thickness of the nonwoven fabric layers (5a and 5b) is disclosed. Because the thickness of each nonwoven fabric layer (5a or 5b) is not disclosed, the density of each nonwoven fabric layer (5a or 5b) in terms of g/m<sup>2</sup> cannot be determined and, therefore, is not disclosed. Further, the density of the combined nonwoven fabric layers (5a and 5b) in terms of g/m<sup>2</sup> also cannot be determined and, therefore, is not disclosed. Consequently, contrary to the Examiner's contention, the density of the nonwoven fabric (5) of Kadoya is not within the claimed density range (15 to 150 g/m<sup>2</sup>) of the inflow layer of Applicant's invention. Accordingly, because the Examiner has not establish that the cited references teach or suggest the claimed density range (15 to 150 g/m<sup>2</sup>) of the inflow layer of the independent claims, each independent claim of the present application (and therefore each dependent claim) cannot be rendered obvious by the cited references.

Third, the Examiner contended that the layers of Kadoya have a decreasing degree of storage capacity because the layers have a decreasing degree of storage capacity with respect to large particles (page 3, lines 9 and 10, of the pending Office Action). Applicant respectfully disagrees. First, the Kadoya does not disclose that its filter layers have a decreasing degree of storage capacity with respect to large particles. It only stated that large particles are trapped by the upstream layers. This, however, does not necessarily mean that the upstream layers have larger storage capacities with respect to large particles. Second, assuming, *arguendo*, that the filter layers of Kadoya have a decreasing degree of storage capacity with respect to large particles, it does not necessarily mean the filter layers have a

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decreasing degree of storage capacity, which is what Applicant claims. In fact, a layer having the largest capacity to store large particles may have the smallest overall storage capacity.

In light of the foregoing remarks, this application is considered to be in condition for allowance, and early passage of this case to issue is respectfully requested. If there are any questions regarding this amendment or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and please charge any deficiency in fees or credit any overpayments to Deposit Account No. 05-1323 (CAM #: 037141.48916US).

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Respectfully submitted,



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